# CITY OF DUVALL

NPDES Stormwater Management Program
2022 Annual Report

Prepared by:



City of Duvall Public Works Department PO Box 1300 Duvall, WA 98019 **March 31, 2022** 

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#### **HISTORY**

The Federal Water Pollution Control Act of 1948 was the first major U.S. law of its kind to address water pollution. Overtime and growing public awareness and concern for controlling water pollution led to amendments in 1972. As amended in 1972, the law became commonly known as the Clean Water Act (CWA), with the intention to stop point source polluters and improve water quality for fishing, drinking, and recreational use.

The <u>National Pollution Discharge Elimination System</u> (NPDES) Permit Program was created by the 1972 CWA to protect and restore surface water quality by requiring a permit to continue discharging into waters of the United States. The NPDES Permit requires annual progress reports with various requirements that are phased into effect throughout the five-year coverage period that expires July 31, 2024. The City's Stormwater Management Program (SWMP) has been organized to reflect the structure of the 2019-2024 permit requirements. The required elements of this SWMP are:

- Stormwater Planning
- Public Education and Outreach
- Public Involvement and Participation
- MS4 Mapping and Documentation
- Illicit Discharge Detection and Elimination
- Controlling Runoff from New Development, Redevelopment, and Construction Sites
- Operations and Maintenance
- Source Control Program for Existing Development

The purpose of the SWMP is to develop and present the City's approach for addressing regulations, adopted plans and programs, and policies that affect urban stormwater, flooding, and associated water-dependent resources. The Public Works Department is responsible for the SWMP and NPDES Permit implementation with input and feedback from the City's Planning Department, Building Department, City Administration, Consultants, and citizens.

Provide comment about the City of Duvall's SWMP:

Email stormwater@duvallwa.gov; Call Public Works at 425.788.3434 ext. 8040 OR

Mail comments to:

City of Duvall - Public Works Department PO BOX 1300 Duvall WA, 98019

View past reports - http://www.duvallwa.gov/159/Stormwater-System-Information

**COVID-19 Restrictions:** The SWMP Plan is updated annually based on the information and resources available at the time. As circumstances cause the City to realign priorities, NPDES Permit efforts will adapt to address the greatest program needs

#### INTRODUCTION

The NPDES Permit Program was created by the 1972 CWA to protect and restore surface water quality by requiring a permit to continue discharging into waters of the United States. This requires those permitted to establish a stormwater program with a set of activities and actions aimed at protecting and restoring local creeks, streams, rivers and lakes. The Washington State Department of Ecology (Ecology) administers the NPDES Permit for the Environment Protection Agency (EPA).

Specific permit requirements are identified using the Permit's citation methodology (e.g. S5.C.3.b). All Western Washington Phase II Municipal NPDES Permits and accompanying manuals, including the entire current NPDES Permit, can be viewed by visiting the Washington Department of Ecology Website: <a href="https://ecology.wa.gov/">https://ecology.wa.gov/</a>.

The City follows permit requirements and plans continued compliance with future requirements as they come into effect.

#### S5 STORMWATER MANAGEMENT PROGRAM

#### S5.C.1 STORMWATER PLANNING

Stormwater planning is a new permit requirement introduced in the 2019 NPDES Permit. The City has engaged in various stormwater planning efforts for many years however, the new permit requirement asks the City to take a fresh look at a broad range of water quality tools available to protect and restore its receiving waters.

#### S5.C.1.(a) Interdisciplinary Team

The City utilizes the Development Review Committee (DRC) to inform and assist in the development of policies and strategies as water quality management tools to protect receiving waters. This committee includes City staff from the Public Works and Engineering Department, Planning Department, Building Department, and Fire Department.

#### S5.C.1.(b) Coordination with Long-Range Plan Updates

The DRC team, as well as City Administration, will continue to ensure that stormwater considerations are used to inform updates to the City's Comprehensive Plan, Transportation Plan, Water Comprehensive Plan, Sewer Capital Improvement Program Plan, Surface and Stormwater Management Plan, and Watershed Plan. The team will ensure watershed protections, water quality standards, and stormwater management are included in long-term planning efforts as it relates to growth and transportation.

#### S5.C.1.(c) Low Impact Development Code Requirements

On an annual basis, Public Works will review municipal and zoning code to affirm that Low Impact Development (LID) principles and best management practices (BMPs) are the preferred approach to site development. This step is included in the City's Annual Code Cleanup process.

#### S5.C.1.(d) Stormwater Management Action Planning

The City adopted the <u>2018 Surface and Stormwater Management Plan</u> which includes basin delineation as well as prioritizing retrofit and stormwater management related projects based on receiving water, water quality and erosion impacts. Included in this planning effort was identifying the top five projects based on ranking and prioritization metrics and included preliminary technical reports in the plans appendix to be used for future budget and grant application efforts.

The City will continue to update and refine the methodology established in the Surface and Stormwater Management Plan to prioritize and rank watersheds based on updated information and data collection. This will allow the City to provide an updated watershed inventory and prioritized and ranked list of receiving waters.

#### S5.C.2 PUBLIC EDUCATION AND OUTREACH

The City provides and participates in a variety of stormwater education and outreach efforts focused on environmental stewardship, including stormwater management. When appropriate, the City partners with neighboring jurisdictions to ensure stormwater outreach messages are clear, consistent, and widely distributed.

#### S5.C.2.(a) and (b) Targeted Stormwater Outreach

The City continues to engage in the following activities to provide targeted stormwater-related outreach programs to the public:

- Coordinate with other permitted jurisdictions in the region through organizations such as the Stormwater Outreach for Regional Municipalities (STORM) and Puget Sound Starts Here (PSSH).
- Provide school-based\* environmental educational programs through a partnership with the Cascade Water Alliance and the environmental education non-profit organization Nature Vision.
- Maintain pet waste stations at the City's Dog Park and various location throughout the
  City. Evaluate the need for a pet waste cleanup campaign, monitor complaints received
  regarding pet waste, and provide general outreach and behavior change efforts to dog
  owners.
- Monitor, update, and replace signage as needed around City-owned stormwater ponds to educate residents, businesses, and visitors about the vital stormwater management function these facilities play.
- Update the City's Illicit Discharges page, <a href="https://www.duvallwa.gov/167/Illicit-Discharges-Spills">https://www.duvallwa.gov/167/Illicit-Discharges-Spills</a>, with current helpful tips and pollution prevention ideas and information.

In 2022, targeted outreach will continue our Business-oriented spill prevention education program working with ECOSS to provide on-site visits and spill kit distribution (as needed) and spill prevention education.

In 2021, the City began implementation of the *Adopt-a-Drain* program in coordination with the STORM group to affect behavior change of residents and business owners (as applicable) in the prevention of illicit discharges into the MS4 by utilizing social marketing practices and methods. This program will continue in 2022.

#### S5.C.2.(c) Creating Stewardship Opportunity

SWMP stewardship opportunities have been created to encourage participation in surface water protection and active incorporation of SWMP principles and goals. General residential stewardship activities such as volunteer plantings are emphasized during public venues such as Earth and Arbor Day, and other public educational events. A partnership between the City and the Riverview School District has developed to complete stormwater educational activities for elementary school children. Stewardship is also encouraged through interaction and volunteer planting/maintenance parties and storm drain marking with the Boy Scouts of America, Riverview School District students, and groups and individuals that are requesting or required to complete volunteer service hours.

**COVID-19 restrictions:** in-person City sponsored activities are currently suspended and did not take place in 2021. Earth and Arbor Day is tentatively planned in April 2022. The City will continue to look for opportunities to support additional stewardship events in the coming year, such as invasive weed removal or riparian plantings either directly, through interested homeowner associations, or with the support of Washington Conservation Corps crews.

#### \$5.C.3 PUBLIC INVOLVEMENT AND PARTICIPATION

The City welcomes comments from the public throughout the year and provides a contact number and email address for residents to contact with questions. The public is invited to comment on the SWMP every year via a public hearing and announcement on the City's website and social media accounts. All city webpages can be translated into other languages using the Google Translate Tool. The City will continue to take advantage of opportunities to translate key written outreach materials into common languages spoken in our community.

Other ways to participate or get involved:

Website: http://www.duvallwa.gov/159/Stormwater-System-Information

Social Media: <u>Facebook</u> and <u>Twitter</u>
 Email: <u>stormwater@duvallwa.gov</u>
 Call Public Works: 425.788.3434

Mail comments to:

City of Duvall - Public Works Department PO BOX 1300 Duvall WA, 98019

#### S5.C.4 MS4 MAPPING AND DOCUMENTATION

In 2022 the City will continue to maintain its comprehensive stormwater conveyance map using ArcGIS geodatabase methods. Updating and managing data is done according to documented

procedures and quality control standards. Global information system (GIS) data includes attributes that describe ownership, water-quality-facility design details, flow-control-facility design details, conveyance design information, outfall size and material details, and spatial data. Both private and public stormwater system data are managed geospatially. Land use and drainage area delineations for each outfall have been developed and are also updated regularly.

#### S5.C.5 ILLICIT DISCHARGE DETECTION AND ELIMINATION

The City's Illicit Discharge Detection and Elimination (IDDE) program is designed to prevent contamination of groundwater and surface water by monitoring, tracking, and removing non-stormwater discharges into the stormwater drainage system. The City's SWMP includes an ongoing program to detect and remove illicit connections and discharges as defined in 40 CFR 122.26(b)(2), including any spills not under the purview of another responding authority, into the municipal separate storm sewers owned or operated by the City.

#### S5.C.5.(a) Reporting and corrective measures

The City has a telephone number that allows residents, visitors, and City employees to report illicit discharges, dumping or other stormwater related concerns within City limits: (425) 939-8040; emergency after-hours: (425) 419-3748. Additionally, reporting parties can email: <a href="mailto:stormwater@duvallwa.gov">stormwater@duvallwa.gov</a>. This information is available on the City's Public Works Department Stormwater web page.

#### Contact Us



To Report Illicit Discharges or Spills:

425.939.8040
425.419.3748 (after-hours,
Public Works Emergency
Only. Please note this number
does not receive text
messages)
Non-Emergency information
may also be sent to Email

During regular business hours calls are received by the Public Works Department. After-hours reporting is managed by a Public Works Maintenance Crew standby person or person(s).

S5.C.5.(b) Target Stormwater Outreach

Please see S5.C.2.(a) and (b).

#### S5.C.5.(c) Ordinance prohibiting non-stormwater and illicit discharges into MS4

This SWMP includes an ongoing program to prevent, detect, characterize, trace, and eliminate illicit connections and illicit discharges into the municipal separate storm sewer system (MS4). A City IDDE Ordinance was developed and adopted into the Duvall Municipal Code (DMC) 9.06.035, to effectively prohibits non-stormwater, illicit discharges into the City's MS4 to the maximum extent allowable under State and Federal law. The City continues to research and network with surrounding jurisdictions and Ecology to continue to improve and update these policies.

#### S5.C.5.(d) IDDE program to detect and identify non-stormwater discharges and illicit connections

The ongoing IDDE program is also designed to address illicit discharges including spills and illicit connections. The program requires by inspection, characterizing the nature of, and potential public and environmental threat posed by an illicit discharge; and attempt to trace the source and eliminate the illicit connection.

The City is required to screen or inspect 12% of the City's stormwater conveyance and catchment system for illicit connections each year. This is accomplished by dry weather screening City outfalls (pipes) that exceed 12-inches in diameter, annual catch basin inspections and stormwater facility inspections. Any identified illicit connections during these inspections are recorded and documented with inspection paperwork or asset management software. The inspector would then notify the Engineering Department for documentation and remedy. Compliance with this provision is achieved by investigating (or referring to the appropriate agency) within 7 days, on average, any complaints, reports or monitoring information that indicates a potential illicit discharge, including spills; and immediately investigating (or referring) problems and violations determined to be emergencies or otherwise judged to be urgent or severe. This protocol will continue in 2022.

#### S5.C.5.(e) Implement a program to address Illicit discharges

Under the IDDE program the City responds to and investigates calls and emails regarding environmental concerns such as illegal dumping, spills, illicit discharges, and illicit connections.

#### S5.C.5.(f) and (g) IDDE Staff Training and Recordkeeping

Public Works Maintenance Crewmembers, inspectors, and those who might come into contact with or otherwise observe, an illicit discharge are trained to identify and report illicit discharges or connections to the Engineering Department. This training is geared towards identification, investigation, termination, cleanup, and reporting illicit discharges including spills and illicit connections including an annual training video presentation describing IDDE identification and response, discussion of illicit discharge and spills identified during the previous 12 months, question and answer session, and lessons learned summary.

Staff trained includes Public Works Field Staff, Planning Field Staff and Building Department Field Staff. Follow-up training is provided as needed to address changes in procedures, techniques or requirements. The City maintains a spreadsheet tracking and recordkeeping system to track all activities conducted to meet the IDDE requirements. All City activities are summarized in an Illicit Discharge Summary Report.

City staff continue to look for resources that are tailored to specific job-related activities to aid in informing all the City's workforce. The City will also continue to refine new employee information and training opportunities. These trainings and recordkeeping activities will continue in 2022.

## S5.C.6 CONTROLLING RUNOFF FROM DEVELOPMENT AND REDEVELOPMENT PROJECTS

This SWMP will implement and enforce a program to reduce pollutants in stormwater runoff to a regulated small MS4 from new development, redevelopment and construction site activities. The program shall apply to private and public development, including transportation projects. Development and redevelopment projects in the City can have a significant impact on the health of the City's creeks, streams, and rivers. City staff review and inspect development sites during construction to ensure temporary and permanent facilities are maintained and functioning as designed.

#### S5.C.6.(a) and (b) Develop Stormwater Management Standards

<u>DMC 9.06.035</u> codifies stormwater management in the City and includes code for construction and stormwater infrastructure design. DMC authorizes the City to enforce provisions required by the NPDES permit, including the minimum requirements in <u>Appendix 1</u>. The City will continue to evaluate and, as necessary, update the DMC to match requirements found in <u>Appendix 10</u> of the 2019 permit. This requirement is scheduled to be completed by the June 2022 permit deadline.

The City will continue to modify and update development standards and applicable DMC as required to include enforceable thresholds by the Permit.

#### S5.C.6.(c) Review and Inspect Public and Private Development/Redevelopment Projects

The City's DRC team reviews permits as submitted for both public and private development/redevelopment and infrastructure improvement projects. This process includes Engineering or Site Plan review and approval, inspections, and enforcement actions necessary to meet standards established by DMC. These practices will continue in 2022.

The program includes provisions to verify adequate long-term Operation and Maintenance (O&M) of post-construction stormwater facilities and BMPs that are permitted and constructed pursuant to S5.C.6.(b) above. City Ordinance 1214 clearly identifies the party responsible for maintenance and inspection of facilities in accordance with all NPDES Permit requirements:

- i. Review of all stormwater site plans for proposed development.
- ii. Inspection prior to clearing and grading activities

- iii. Inspect all construction site temporary erosion and sediment controls for proper maintenance and continued function.
- iv. Inspect all permanent establishment of erosion control measures and or required surface and stormwater management facilities every 6 months until 90% buildout of lots is achieved.
- v. Final inspection of permitted development site upon completion of construction and prior to Final Plat approval or occupancy to ensure proper installation and function of stormwater facilities.
- vi. Compliance with required inspections and corrective actions is documented in project folders and completed by qualified personnel.
- vii. All record keeping of inspections and enforcement actions are maintained in the project folders.
- viii. Enforcement strategies are identified in <u>DMC 9.06.130</u> in response to issues of non-compliance. The City is in the process of updates to enforcement sections of DMC to comply with escalating enforcement requirements in accordance with the January 2023 NPDES Permit deadline.

The City is currently evaluating new financial and permit generating software that will streamline the permit submittal, review and approval process. The Public Works Department also manages a Wet Weather Permit that requires additional review, evaluation, and approval for earthwork construction activities occurring between October 1 and April 30. These practices will continue in 2022.

#### S5.C.6.(d) Notice of Intent (NOI)

In 2022 the City will continue to make the application for NOIs for coverage under the NPDES Construction Stormwater General Permit and the NPDES General Industrial Stormwater Permit available to the development community. These forms are available on Ecology's website.

#### S5.C.6.(e) Staff Training

Staff responsible for implementing the program to control stormwater runoff from new development, redevelopment and construction sites, including permitting, plan review, construction site inspections, and enforcement, are trained to conduct these activities. Follow-up staff training, including peer-to-peer training, will be provided in 2022 as needed to address changes in standards, procedures, and techniques. Staff responsible for inspecting temporary erosion and sediment control (TESC) measures at larger construction sites are Certified Erosion and Sediment Control Lead (CESCL) certified. Staff responsible for inspecting construction TESC measures at smaller sites are trained to do so. In many cases, these staff are also CESCL-certified. The City will continue to document and maintain all relevant staff training records.

#### S5.C.7 OPERATIONS & MAINTENANCE

The City has taken many steps to ensure operational and maintenance activities are done in a manner that protects and reduces potential impacts to stormwater infrastructure and creeks, streams, rivers, wetlands, and lakes.

#### S5.C.7.(a) Maintenance Standards

The City has adopted the Surface and Stormwater Management Plan, Watershed Plan, 2021 KCSWDM, etc.

#### S5.C.7.(b) Maintenance of Facilities Regulated by the City

The City verifies adequate long-term operation and maintenance (O&M) of permanent stormwater facilities and BMPs for all private projects. The City's maintenance standards implemented are as protective, or more than those specified in the **Stormwater Management Manual for Western Washington** (Volume V, Chapter 4) or a Phase I program approved by Ecology.

The City works with owners or operators of private stormwater facilities to ensure they continue functioning as designed. All stormwater infrastructure, including runoff treatment and flow control facilities, are inspected prior to a formal final approval or acceptance by the City. Once this occurs on private sites, these facilities are added to the long-term private system inspection program. Each year, City inspectors inspect all private stormwater infrastructure required by the permit. In all cases where maintenance needs are identified, the property owner provides the City with receipts and other documentation to prove the work has been completed.

#### S5.C.7.(c) Maintenance of Facilities Owned & Operated by the City

The City completes annual inspections of stormwater treatment and flow control BMPs and or facilities in accordance with adopted maintenance standards.

The City will continue to implement its municipal catch basin inspection program. All catch basins, inlets, and control structures owned or operated by the City are inspected every two years. Catch basins will are cleaned if the inspection indicates cleaning is needed to comply with maintenance standards established in the **Stormwater Management Manual for Western Washington**. Any identified maintenance actions occurred within the timeframe outlined by the NPDES Permit. Decant water shall be disposed of in accordance with Appendix 6 – Street Waste Disposal.

New conveyance, catchment, and stormwater facilities are added to the City's inventory and inspection list when the City takes ownership, typically after the maintenance and defect period is over. City staff and Public Works Crew will begin to utilize asset management software to prepare maintenance requests and work orders in 2022.

The City inspects known "hotspots" in the stormwater system immediately after a large storm event (requirement: 24-hour storm event with a 10-year or greater reoccurrence interval). For the purpose of hotspot checks, a large storm in Duvall is considered two or more inches of rainfall in a 24-hour period, unless otherwise directed by the Engineering Department. There is a rainfall gauge located at the City's Wastewater Treatment Plant (WWTP).

#### S5.C.7.(d) Practices, Policies, Procedures to Reduce Stormwater Impacts of Municipal Operations

The City has developed and implemented practices, policies, and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the City, and

road maintenance activities under the functional control of the City include, but are not limited to: streets, parking lots, roads, highways, buildings, parks, open space, road rights-of-way, maintenance yards, and stormwater treatment and flow control BMPs/facilities.

#### S5.C.7.(e) Employee Training

The training program addresses the importance of protecting water quality, operation and maintenance standards, inspection procedures, relevant SWPPPs, selecting appropriate BMPs, ways to perform their job activities to prevent or minimize impacts to water quality, and procedures for reporting water quality concerns. The City maintains records of ongoing training program for employees whose primary construction, operations, or maintenance job functions may impact stormwater quality. Records include dates, activities or course descriptions, and names and positions of staff in attendance. This practice will continue in 2022.

#### S5.C.7.(f) Stormwater Pollution Prevention Plan for City Facilities

The City implements a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the City in areas subject to this Permit that are not required to have coverage under the Industrial Stormwater General Permit or another NPDES permit that authorizes stormwater discharges associated with the activity.

The current SWPPP will be update as required to fully meet detailed permit requirements.

#### S5.C.7.(g) Record Maintenance

The City maintains records of inspection, maintenance, and repair to City-operated stormwater facilities as detailed in this section.

#### S5.C.8 SOURCE CONTROL FOR EXISTING DEVELOPMENT

The City currently uses the existing GIS inventory and annual inspections of public and privately-owned stormwater facilities and catch basins to satisfy this requirement and prevent and reduce pollutants in runoff from areas that discharge to the MS4. The City will continue to require pollution preventing BMPs and facilities for pollution generating sources based on land use and activities. Staff will develop updates to DMC that include progressive and escalating enforcement. The City will continue to refine and update existing policy and procedure to comply with permit requirements and deadlines.

#### S8 MONITORING AND ASSESSMENT

The City is an active member of the Stormwater Action Monitoring (SAM) consortium, which coordinates a regional monitoring program that includes (1) Status and Trends monitoring, (2) Stormwater Program Effectiveness monitoring, and (3) Source Identification and diagnostic monitoring. The City has opted to fully participate in SAM under the current permit cycle and is active on several SAM sub-committees. For information about SAM-sponsored monitoring projects, please visit the SAM website: <a href="https://ecology.wa.gov/Regulations-Permits/Reporting-requirements/Stormwater-monitoring/Stormwater-Action-Monitoring">https://ecology.wa.gov/Regulations-Permits/Reporting-requirements/Stormwater-monitoring/Stormwater-Action-Monitoring</a>.

#### **S8.A STATUS AND TRENDS MONITORING**

The City has chosen to participate in the RSMP to satisfy this requirement and notified Ecology prior to the deadline.

#### S8.B EFFECTIVNESS AND SOURCE IDENTIFICATION STUDIES

The City has chosen to participate in the SAM effectiveness and source identification programs in order to meet this requirement.

#### **GLOSSARY**

**Best Management Practices (BMPs):** The schedules of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices approved by the Department of Ecology that, when used singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to waters of Washington State. For example, a structural BMP is the use of catch basin cloth inserts to capture sediment from turbid water prior to the water discharging into the stormwater system.

**Clean Water Act (CWA):** Formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972, Pub. L. 92-500, as amended Pub. L. 95-217, Pub L. 95-576, Pub L. 6-483 and Pub. L. 97-117, 33 U.S.C. 1251 et seq.

**Illicit Connection**: Any man-made conveyance that is connected to a municipal separate storm sewer without a permit, excluding roof drains and other similar type connections.

Illicit Discharge: Examples include sanitary sewer connections, floor drains, channels, pipelines, conduits, inlets, or outlets that are connected directly to the municipal separate storm sewer system. Any discharge to a municipal separate storm sewer that is not composed entirely of stormwater except discharges pursuant to an NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from firefighting activities.

**Low Impact Development (LID):** A stormwater management and land development strategy applied at the parcel and subdivision scale that emphasizes conservation and use of onsite natural features integrated with engineered, small-scale hydrologic controls to more closely mimic predevelopment hydrologic functions. It aims to capture water, slow it down, allow it to enter our soil, and clean and cool the water before it reaches our streams.

**Municipal Separate Storm Sewer System (MS4):** A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

 Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State Law) having jurisdiction over disposal of wastes, stormwater, or other wastes, including special districts under State Law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe of an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the CWA that discharges to water of the United States;

- ii. Designed or used for collecting or conveying stormwater;
- iii. Which is not a combined sewer; and
- iv. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

**National Pollution Discharge Elimination System (NPDES):** The national program for issuing, modifying, revoking, and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of pollutants to surface waters of the state from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington State Department of Ecology.

**Non-Point Source Pollution (NPS):** NPS pollution is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters, and ground waters.

**Point Source Pollution:** Any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture.

**Stormwater:** Runoff during and following precipitation and snowmelt events, including surface runoff and drainage.

**Stormwater Management Program (SWMP):** A set of actions and activities designed to reduce the discharge of pollutants from the regulated small MS4 to the maximum extent practicable and to protect water quality, and comprising the components listed in S5 and S6 of the NPDES permit and any additional actions necessary to meet the requirements of the NPDES permit.

**Surface Water:** Includes lakes, rivers, ponds, streams, inland waters, saltwaters, wetlands, other surface waters, and water courses as well as shallow groundwater.

**Total Maximum Daily Load (TMDL):** A water cleanup plan. A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The calculation must include a margin of safety to ensure that the water body can be used for the purposes the state has designated. The calculation must also account for seasonable variation in water quality. Water quality standards are set by states, territories, and tribes. They identify the uses for each water body (i.e. drinking water supply, contact recreation such as swimming, and

aquatic life support such as fishing), and the scientific criteria to support that use. The Clean Water Act, Section 303, establishes the water quality standards and TMDL programs.

